

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as indicated hereafter. It is believed that the following amendments and additions add no new matter to the present application.

In the Specification:

Please replace the paragraph starting on p. 5, line 20 with the following amended paragraph:

In the present invention, a stereo sound signal is first read from an audio/video medium like a VCD disc 20 or an MP3 file 30 (Step 100). The stereo sound signal includes a left sound signal (L) and a right sound signal (R). The Hafler technique is used to expand the stereo sound signal into sound signals of 5 channels (Step 101). In other words, the left sound signal (L) is output to the Front L channel 12, the right sound signal (R) is output to the Front R channel 13, the mean of the left sound signal and the right sound signal $(L+R)/2$ is output to the Front M channel 14, the left sound signal minus the right sound signal $(L-R)$ is output to the Rear L channel 15, and the right sound signal minus the left sound signal $(R-L)$ is output to the Rear R channel 16. A sound reverberation operation is performed to sound signals of the Front L channel and the Front R channel or the Rear L channel and the Rear R channel to generate sound with echo/reverberation. The Rear L channel 15 and the Rear R channel 16 are generated by the difference of the left sound signal (L) and the right sound signal (R). If the left sound signal (L) and the right sound signal (R) are the same, the Rear L channel 15 and the Rear R channel 16 cancel each other out, thus producing no sound. Therefore, the present invention makes use of a sound reverberation technique whereby the Rear L channel 15 and the Rear R channel 16 undergo a sound reverberation operation and generate sound with reverberation (Step 102). The situation that the Rear L channel 15 and the Rear R channel 16 cancel each other can thus be avoided, hence accomplishing a wider listening space.

Please replace the paragraph starting on p. 6, line 18 with the following amended paragraph:

The sound reverberation operation makes use of a feedback delay ~~networks~~ network (FDN) 40 shown in FIG. 4. The FDN technique provides two delay queues 41 and a queue matrix 42 for each channel. The sound signal of the channel is delayed and then output to the delay queues 41 to generate two different delay signals. The delay time of each delay queue 41 is generated by setting a delay constant 43 for the delay queue 41. The delay times are different, and are set to be between about 2-10 ms. The delayed sound signal is then fed back to the input terminal of delay queue 41 via the queue matrix 42 and finally added into the sound signal to form a continually fed-back sound with reverberation. The delay queues 41 and the queue matrix 42 are generated through calculation with software.